Amendments to the Claims

Please amend Claims 1, 4, 10, 11, 14, 20, 21, 24, 30 and 31.

Listing of Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1 (currently amended): A method for programming at least a portion of a multiplexed vehicle network, comprising:

receiving user input via an intuitive graphical user interface;

identifying the layout of a peer-to-peer vehicle network based on the user input;

defining at least one of input, output and operational characteristics of components of the vehicle network based on the user input;

defining logical relationships between the components of the vehicle network based on the user input;

compiling network data based on the layout, component characteristics and logical relationships; and

storing the compiled data in at least one network node of the vehicle network, wherein the components function in accordance with the defined characteristics and relationships.

Claim 2 (original): A method according to claim 1 wherein the step of identifying the layout of the vehicle network includes identifying a vehicle network type.

Claim 3 (original): A method according to claim 2 wherein the step of compiling is based on the vehicle network type.

Claim 4 (currently amended): A method according to claim 1 wherein the step of identifying the layout of the vehicle network includes identifying a particular network node.

Claim 5 (original): A method according to claim 4 wherein the step of identifying the layout of the vehicle network further includes identifying a component to provide input to the network node.

Claim 6 (original): A method according to claim 4 wherein the step of identifying the layout of the vehicle network further includes identifying a component to receive output from the network node.

Claim 7 (original): A method according to claim 1 wherein the step of defining logical relationships includes:

identifying a command;

selecting an input; and

assigning the command to the input.

Claim 8 (original): A method according to claim 1 wherein the step of defining logical relationships includes:

identifying a first command;

selecting an output; and

assigning the first command to the output.

Claim 9 (original): A method according to claim 8 wherein the step of defining logical relationships further includes:

identifying a second command;

identifying a relationship between the first and second commands; and

assigning the second command and the relationship to the output.

Claim 10 (currently amended): A method according to claim 1, further including the step of transmitting at least a portion of the stored data and instructions to the vehicle network controller. a network node, wherein the data and instructions form a control program for the node.

Claim 11 (currently amended): An apparatus for programming at least a portion of a multiplexed vehicle network, comprising:

means for receiving user input via an intuitive graphical user interface;

means for identifying the layout of a peer-to-peer vehicle network based on the user input;

means for defining at least one of input, output and operational characteristics of components of the vehicle network based on the user input;

means for defining logical relationships between the components of the vehicle network based on the user input;

means for compiling network data based on the layout, component characteristics and logical relationships; and

means for storing the compiled data in at least one network node of the vehicle network, wherein the components function in accordance with the defined characteristics and relationships.

Claim 12 (original): An apparatus according to claim 11 wherein the means for identifying the layout of the vehicle network identifies a vehicle network type.

Claim 13 (original): An apparatus according to claim 12 wherein the means for compiling operates based on the vehicle network type.

Claim 14 (currently amended): An apparatus according to claim 11 wherein the means for identifying the layout of the vehicle network identifies a particular network node.

Claim 15 (original): An apparatus according to claim 14 wherein the means for identifying the layout of the vehicle network further identifies a component to provide input to the network node.

Claim 16 (original): An apparatus according to claim 14 wherein the step of identifying the layout of the vehicle network further identifies a component to receive output from the network node.

Claim 17 (original): An apparatus according to claim 11 wherein the means for defining logical relationships includes:

means for identifying a command;

means for selecting an input; and

means for assigning the command to the input.

Claim 18 (original): An apparatus according to claim 11 wherein the means for defining logical relationships includes:

means for identifying a first command;

means for selecting an output; and

means for assigning the first command to the output.

Claim 19 (original): An apparatus according to claim 18 wherein the means for defining logical relationships further includes:

means for identifying a second command;

means for identifying a relationship between the first and second commands; and

means for assigning the second command and the relationship to the output.

Claim 20 (currently amended): An apparatus according to claim 11, further including means for transmitting at least a portion of the stored data and instructions to ~~the vehicle network controller.~~ a network node, wherein the data and instructions form a control program for the node.

Claim 21 (currently amended): An apparatus for programming at least a portion of a multiplexed vehicle network, the apparatus comprising:

a processor;

a memory connected to said processor storing a program to control the operation of said processor;

the processor operative with the program in the memory to:

receive user input via an intuitive graphical user interface;

identify the layout of a <u>peer-to-peer</u> vehicle network based on the user input;

<u>define at least one of input, output and operational characteristics of components of the vehicle network based on the user input;</u>

define logical relationships between <u>the</u> components ~~of the vehicle network~~ based on the user input;

compile network data based on the layout<u>, component characteristics</u> and logical relationships; and

store the compiled data <u>in at least one network node of the vehicle network, wherein the components function in accordance with the defined characteristics and relationships.</u>

Claim 22 (original): An apparatus according to claim 21, wherein the processor is further operative with the program in the memory to identify a vehicle network type.

Claim 23 (original): An apparatus according to claim 22, wherein the step of compiling is based on the vehicle network type.

Claim 24 (currently amended): An apparatus according to claim 21, wherein the processor is further operative with the program in the memory to identify a<u> particular</u> network node.

Claim 25 (original): An apparatus according to claim 24, wherein the processor is further operative with the program in the memory to identify a component to provide input to the network node.

Claim 26 (original): An apparatus according to claim 24, wherein the processor is further operative with the program in the memory to identify a component to receive output from the network node.

Claim 27 (original): An apparatus according to claim 21, wherein the processor is further operative with the program in the memory to: identify a command;

select an input; and

assign the command to the input.

Claim 28 (original): An apparatus according to claim 21, wherein the processor is further operative with the program in the memory to:

identify a first command;

select an output; and

assign the first command to the output.

Claim 29 (original): An apparatus according to claim 28, wherein the processor is further operative with the program in the memory to: identify a second command;

identify a relationship between the first command and the second command; and

assign the second command and the relationship to the output.

Claim 30 (currently amended): An apparatus according to claim 21, wherein the processor is further operative with the program in the memory to transmit at least a portion of the stored data and instructions to ~~the vehicle network controller.~~ a network node, wherein the data and instructions form a control program for the node.

Claim 31 (currently amended): A computer-readable storage medium encoded with processing instructions for implementing method for programming at least a portion of a multiplexed vehicle network, the processing instructions for directing a computer to perform the steps of:

receiving user input via an intuitive graphical user interface;

identifying the layout of a peer-to-peer vehicle network based on the user input;

defining at least one of input, output and operational characteristics of components of the vehicle network based on the user input;

defining logical relationships between the components ~~of the vehicle network~~ based on the user input;

compiling network data based on the layout, component characteristics and logical relationships; and

storing the compiled data in at least one network node of the vehicle network, wherein the components function in accordance with the defined characteristics and relationships.